

## CLIMATOLOGICAL DATA FOR APRIL, 1912.

## DISTRICT No. 5, UPPER MISSISSIPPI VALLEY.

GEORGE M. CHAPPEL, District Editor.

## GENERAL SUMMARY.

The weather of April, 1912, in the upper Mississippi Valley was more nearly seasonable than that of any other month in the last year or more. Over much of the district the month was unusually free from marked abnormalities in weather conditions, and it will go on record as an unusually pleasant one for the time of year. This statement can hardly apply, however, to the Illinois area. There the month was characterized by a series of violent local storms, a heavy snow storm, and flood conditions. The local storms, which were of tornadic character, caused the death of many persons and wrought much damage to property, while the floods were productive of great monetary loss at some points and caused much inconvenience. Description of the tornadoes follows in separate articles. The storm that passed over parts of Newton County, Ind., late in the afternoon of the 21st was a continuation of the severe storms in Illinois on the same date. Nine persons were killed, seven being members of the family of Charles Rice, who lived a few miles west of Morocco, Ind. Several persons were slightly injured and much damage was done to property in that vicinity. On the 13th storms of tornadic character occurred near Boone and Earlham, Iowa. No human lives were lost, but damage to the extent of several thousand dollars was done to barns, outbuildings, fruit trees, etc.

The frosts of the month caused but little if any damage, owing to the backwardness of the season. In Illinois the wet weather hindered farm work materially. At the close of the month vegetation was advancing with unusual rapidity as the result of favorable moisture and temperature conditions.

The following table presents in condensed form the leading features of climatological interest for the various parts of the district:

Parts of States within district 5.	Temperature..				Precipitation.					
	Mean.	Depart.	Highest.	Lowest.	Average.	Depart.	Greatest total.	Least total.	Average snowfall.	Average number of days with precipitation.
North Dakota.....	43.8	+3.8	88	7	2.40	+0.92	4.10	0.90	2.4	7
Minnesota.....	45.8	+3.1	86	6	2.18	0.00	11.16	0.40	0.2	6
South Dakota.....	47.6	+2.8	83	17	5.62	+2.28	6.84	4.40	0	8
Wisconsin.....	45.8	+2.2	80	9	2.48	-0.27	4.89	0.79	1.4	7
Iowa.....	49.8	+1.3	81	20	2.56	-0.32	4.98	0.78	1.8	8
Missouri.....	53.9	+0.8	82	26	5.41	+1.85	11.71	2.89	1.7	9
Indiana.....	50.2	+2.0	79	22	3.47	+0.04	4.40	2.66	0.1	10
Illinois.....	52.6	+1.7	86	20	4.74	+1.31	8.60	0.69	2.9	11

## TEMPERATURE.

The average temperature for the district, 309 stations reporting, was  $2.0^{\circ}$  higher than usual, or  $48.1^{\circ}$ . The monthly means were above the normal in all parts of the district, but over the southern half of it the excess in temperature did not, as a rule, exceed  $1^{\circ}$  a day. The weather was relatively warmer in the northern sections, the temperature averaging  $4^{\circ}$  or  $5^{\circ}$  above the normal in the North Dakota area and in northwestern Minnesota. The monthly means at the individual stations ranged from  $59.4^{\circ}$ , at Carbondale and Cobden, Ill., to  $38.6^{\circ}$  at Vudesare, Wis., or a difference of slightly more than  $20^{\circ}$  between the warmest and coolest parts of the district. As a rule both the highest and lowest temperatures of the month were experienced during the first decade, many stations having the extremes within two days of each other. At quite a number of stations, however, the highest and lowest temperatures did not occur till later in the month. One peculiarity of temperature conditions worthy of note was the occurrence of higher temperatures in the northern part of the district than in the southern. The maximum of  $88^{\circ}$ , at Forman, N. Dak., on the 4th was not equaled elsewhere, and thermometer readings above  $80^{\circ}$  were comparatively rare except in the North Dakota and Minnesota areas. No unusually low minimum temperatures were reported; in fact, they were above average of former years in most cases. Over large areas the lowest temperature for the month was only slightly below the freezing point and comparatively few stations recorded temperatures less than  $20^{\circ}$ . The lowest reported was  $6^{\circ}$ , at Itasca State Park, Minn., on the 1st.

## PRECIPITATION.

The 336 stations that reported show an average precipitation of 3.02 inches, which is about one-third of an inch above the normal. Geographically considered the distribution was somewhat more irregular than usual. Generally speaking the amounts were much heavier over the southern third of the district than elsewhere. Over much of central and southern Illinois and the Missouri area the precipitation exceeded 5 inches, and it was one of the wettest, if not the wettest, April in many years. The greatest monthly amount, 11.71 inches, occurred at Warrenton, Mo., while three stations in southern Illinois reported more than 8 inches. The average fall over the northern two-thirds of the district was about 2.50 inches, but some stations reported more than 4 inches. At Fosston, Minn., the amount was 11.16 inches. Only a few stations had less than 1 inch, the least monthly amount being 0.40 inch, at Fort Ripley, Minn.

Precipitation occurred with marked regularity throughout the month. Seven distinct periods can be traced in southern sections. The fall was heavier in the latter

half of the month than in the first half. Twelve stations, 8 of which are in Illinois, reported 2.50 inches or more in a 24-hour period.

**Snowfall.**—One of the heaviest April snowstorms on record for eastern Iowa, northern Illinois, and southern Wisconsin prevailed on the 17th and 18th. Upward of 12 inches fell over some areas and the snow was so wet and heavy that considerable damage was caused. Limbs were broken off trees, and telephone and telegraph companies suffered. The average snowfall for the district was 1.6 inches, and the greatest monthly amount, 14.5 inches, occurred at Galva in northern Illinois.

#### MISCELLANEOUS.

The prevailing wind direction was southwesterly, but in the Northern States it was northwesterly. The highest velocity was 48 miles an hour from the south, at Springfield, Ill., on the 25th in connection with a wind storm that caused about \$25,000 damage at that place. This equals the highest previous velocity at that station.

The percentage of the possible amount of sunshine was above the normal by about 5 per cent, the average being about 65 per cent. There was remarkable uniformity in the number of clear, partly cloudy, and cloudy days in the various parts of the district, the average of which was 12, 8, and 8, respectively. The average number of days with 0.01 inch or more precipitation was eight.

#### RIVERS.

High stages prevailed in most of the rivers and streams in the southern part of the district all the month. The Mississippi River was above flood stage early in the month from Keokuk, Iowa, southward. At Hannibal, Mo., the flood stage lasted to April 16, and the stage reached, 19 feet, is the highest since June, 1903. But little damage resulted at that point. The flood at Cairo, Ill., will be fully described in a special bulletin to be issued later by the Weather Bureau. Flood stages were not reached in the Mississippi River from the Davenport district northward. At the close of the month the gage readings in that district were from 2 to 5 feet lower than those reached at the time of the crest of the rise early in the month. On the 3d and 4th the ice in the Mississippi at Dubuque, Iowa, gorged at the Dubuque drawbridge, necessitating the use of dynamite. On the 3d the sheer boom was carried down stream, but lodged on the east side of the river and was recovered. The Illinois River at La Salle and Beardstown, Ill., was above flood stage throughout the month, but no damage was reported. The improved stage of water in the rivers of Minnesota was of benefit in supplying the mills with logs.

#### TORNADIC STORMS IN ILLINOIS.

By CLARENCE J. ROOT, Section Director.

In the late afternoon of April 21 severe and destructive tornadic storms occurred at a number of places in Illinois. There were two principal storm areas, one in the northeast part of the State and another in the south end. The distance between these two areas is about 225 miles. The reports received at this office from authentic sources place the number of dead at 18, but it is probable that all deaths have not been reported. The newspaper estimates were too high. A great many persons were injured and hundreds were rendered homeless. The property loss is probably near a million

dollars. The northern storm area covers the region extending from LaSalle and Livingston counties eastward into Indiana. An effort was made to trace a storm track, but the times given for the reports, together with the fact that so wide an area was covered, would seem to indicate that there were a number of storms operating at the same time. Reports were received from eleven parties in this district. They all agree that the storm moved in a direction north of east, that the cloud had a funnel-shaped pendant, that the storm was accompanied by rain and hail, and that there was a loud, roaring noise. The width of the paths was given from 100 feet to 1,300 feet. Some observers state that the trees fell in all directions, while others claim that they lay to the east. The losses reported are as follows: Grundy county, \$100,000; Kankakee county, \$300,000; Dwight, \$25,000; Martinton, \$10,000; Chatsworth, \$40,000. Two lives were lost in Kankakee County (Mrs. D. W. Jay and Mrs. Robert Hawkins) and three near Campus (Wilson Hulse, wife, and baby). Mr. E. G. Cryder, cooperative observer, Morris, Ill., says: "I viewed the path of this storm and the destruction was very severe. Some of the farms did not have a building left. At one place it pulled up 40 rods of wire fence. Did not leave a post standing." Mr. E. O. Welch, cooperative observer at Dwight, Ill., reports as follows: "There was no marked indication of the approaching storm at 3 p. m., but shortly after thunder was heard in the southwest increasing in volume, and at 4.10 rain began falling in a spasmodic sort of a way, with some hail. At 4.30 heavy rain was falling accompanied by large hailstones, weighing from 4 to 6 ounces, of a flat appearance and seemed to be formed by the freezing together of 10 or more smaller ones. At this time a black cloud was seen in the southwest about 2 miles from town, and it is said by those who saw it at this time to have had a funnel-shaped pendant. When I saw it myself three or four minutes later it resembled a huge column reaching from the earth to the clouds which hung very low, and appeared to be about 50 feet in diameter and was moving east-northeast, making a path about 80 rods wide. Much damage was done 2 miles south, and 3 miles southeast, two houses were entirely destroyed, a number of others badly damaged, together with outhouses and cornerubs and some stock. Loss probably \$25,000 or \$30,000. Sixty-four hundredths of an inch of rain fell, most of it in about 20 minutes. At 4.50 p. m. the sun was shining. No loss of life in this immediate vicinity." The storm in DeWitt County is reported by J. F. Ziegler, cooperative observer: "The greatest damage was done near Salt Creek south of Clinton, but the storm seemed to raise and strike at times in different places. It was first reported near Rowel, 4 miles southwest of the above-mentioned place, but no great damage was done there, then at Clinton, and lastly 2 miles farther northeast, where it destroyed a building within 100 feet of my instrument shelter. The storm here (at the last place) was not as strong, or perhaps there was less in its path to show its strength."

#### TORNADO AT MURPHYSBORO AND BUSH, ILL., APRIL 21, 1912.

By Prof. F. H. COLYER, Cooperative Observer, Carbondale, Ill.

The storm, as a destructive one, started 3 miles north of Murphysboro, Ill., and moved slightly northeastward, about  $15^{\circ}$  to  $20^{\circ}$  north of east. In this track the funnel cloud zigzagged more or less. From reports and actual visitation I could trace the storm path something

TABLE 1.—Climatological data for April, 1912. District No. 5, Upper Mississippi Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.	Sky.			
<i>North Dakota.</i>																			
Amenia.	Cass.	954	15	45.8	+ 4.0	84	4	20	24	56	2.95	+ 0.82	1.40	T.	3	19	4	nw.	
Bottineau.	Bottineau.	1,638	17	42.8	+ 3.7	74	3†	18	21	46	1.36	+ 0.88	0.40	11.0	9	12	8	nw.	
Bowbells.	Burke.	1,958	42	47.7	-	78	10	9*	17	46*	2.05	-	0.74	5.5	7	19	6	n.	
Cando.	Towner.	1,488	11	43.8	+ 5.1	75	3	20	16	48	2.78	+ 2.18	0.72	-	7	19	5	n.	
Crosby.	Divide.	6	47.6	-	82	4†	20	27	56	1.32	-	0.72	0	4	17	10	3	....	
Devils Lake.	Ramsey.	1,482	7	42.8	+ 4.6	75	4	21	16	43	2.41	+ 0.38	0.87	1.2	11	10	7	ne.	
Donnybrook.	Ward.	1,760	13	42.2	+ 3.9	75	9	8	16	42	2.43	+ 1.74	1.04	6.5	8	14	8	nw.	
Dunseith.	Rolette.	15	42.6	+ 2.5	71	4	19	16	41	2.14	-	1.49	0.68	-	8	11	12	7	
Edmore.	Ramsey.	1,524	7	43.0	-	77	4	16	27	38	1.71	-	0.40	0	9	16	11	3	
Fessenden.	Wells.	1,610	18	43.8	-	76	4	19	19d	7	54d	-	0.52	T.	8	18	5	ne.	
Forman.	Sargent.	1,249	50.2	+ 7.1	88	4	19d	7	54d	2.82	+ 0.47	2.20	-	0	5	18	5	nw.	
Grafton.	Walsh.	827	21	42.2	+ 3.0	80	4	18	27	57	2.05	+ 0.57	0.68	0.5	10	12	11	7	
Granville.	McHenry.	1,504	6	41.8	-	75	4†	15	16	48	2.15	-	1.09	0.6	7	9	9	nw.	
Hannash.	Cavalier.	1,568	7	38.8	-	74b	4	14b	24b	2.18	-	0.90	12.0	7	-	-	-	uv.	
Hansboro.	Towner.	-	41.0	-	76	4	15	16	45	2.79	-	1.00	5.5	7	17	8	5	nw.	
Hillsboro.	Trail.	901	7	46.5	-	82	4	21	27	47	2.29	-	1.61	T.	5	18	7	5	
Lakota.	Nelson.	1,579	6	42.7	-	74	4	19	27	42	1.87	-	1.00	2.2	6	8	13	9	
Langdon.	Cavalier.	1,615	17	39.3	-	70	4	17	1	40	2.63	-	0.97	-	10	18	0	12	
Larimore.	Grand Forks.	1,134	17	42.6	+ 2.7	77	4	19	27	50	2.38	+ 0.92	0.68	T.	9	17	6	7	
Lisbon.	Ransom.	1,091	8	46.6	+ 6.2	86	8	18	7	62	3.93	+ 2.17	1.87	0	4	13	9	8	
McKinney.	Renville.	1,640	18	43.6	+ 3.2	77	3	7	16	47	2.68	+ 1.81	1.20	9.0	5	13	11	6	
McLeod.	Ransom.	-	45.5	-	82	4	11	1	52	4.10	-	2.85	0	4	9	15	6		
Manfred.	Wells.	1,605	11	43.6	-	76	4	14	21	46	3.08	-	0.92	1.0	13	15	11	nw.	
Mayville.	Trail.	975	16	46.4	+ 3.4	81	4	20	2	49	2.22	-	1.56	0	5	20	2	8	
Minot.	Ward.	1,557	14	43.8	+ 2.4	76a	9	18	16	46*	2.47	+ 1.08	1.00	2.7	6	13	4	13	
Minto.	Walsh.	820	19	44.7	+ 4.2	80*	4	19*	27	46*	1.86	+ 0.20	0.83	-	7	16	6	8	
Oriska.	Barnes.	1,270	7	44.8	-	82	4	20	27	56	2.39	-	1.51	0	5	15	11	4	
Park River.	Walsh.	998	9	44.1	-	81	3	18	2	48	3.19	-	1.10	-	11	10	13	7	
Pembina.	Pembina.	789	14	42.6	+ 2.7	78	3	17	27	48	0.90	-	0.32	0.42	7	19	2	9	
Power.	Richland.	1,020	20	47.4	+ 5.6	82	9	19	1†	46	3.99	2.15	3.20	0	3	10	10	nw.	
Pratt.	McHenry.	-	7	40.5	-	76	3	13	1	48	2.75	-	1.35	1.0	7	23	3	4	
Towner.	do.	-	45.1d	-	76d	3†	21d	10†	45	2.20	-	0.68	3.0	7	13	12	5	nw.	
University.	Grand Forks.	830	20	44.3	+ 3.2	80	4	21	27	44	1.65	-	0.59	0.84	0	7	19	8	3
Wahpeton.	Richland.	962	20	45.6	+ 0.9	81	8	21	7	49	2.53	+ 0.24	1.00	0	5	16	3	11	
Walhalla.	Pembina.	966	8	43.4	-	80	4	27	50	2.08	-	0.80	8.0	6	13	12	5	n.	
Westhope.	Bottineau.	-	43.6	-	76	9	15	16	46	2.31	-	0.68	9	8	19	3	ne.		
Willow City.	do.	1,471	19	42.8	+ 2.9	76	3†	29	21	51	1.75	+ 0.89	0.49	1.0	6	7	17	6	e.
<i>Minnesota.</i>																			
Albert Lea.	Freeborn.	1,220	21	48.8	+ 3.3	76	5	26	3	39	2.40	-	0.08	1.25	0	6	10	15	nw.
Alexandria.	Douglas.	1,391	18	45.8	+ 4.4	81	4†	19	1	46	2.47	+ 0.28	1.20	T.	6	18	1	11	
Angus.	Polk.	10	43.5	+ 3.3	78	4	17	27	42	2.13	-	0.60	-	8	12	11	7	nw.	
Bagley.	Clearwater.	6	42.7	-	76	5	16	17	45	1.32	-	0.92	T.	4	6	20	4	se.	
Baudette.	Beltrami.	1,084	1	42.2	-	73	4	19	22	38	1.63	-	1.19	0.5	8	13	11	nw.	
Beardsley.	Bigstone.	1,090	16	48.5	+ 4.1	84	4	15	1	52	4.26	+ 2.00	1.75	0	7	12	9	9	
Beaulieu.	Mahnomen.	1,200	9	43.4	-	79	5	10	1	51	-	-	0.80	8	22	3	5	e.	
Bemidji.	Beltrami.	1,400	9	44.0	-	79	5	22	1	46	1.45	-	0.80	0	8	12	5	....	
Bird Island.	Renville.	1,039	22	47.2	+ 2.4	80	5	23	7	50	2.93	+ 0.74	0.87	T.	7	11	6	13	
Brainerd.	Crow Wing.	1,215	5	45.4	-	80	5	20	7	49	1.42	-	0.51	0	8	11	6	n.	
Caledonia.	Houston.	1,179	19	48.9	+ 3.3	71	11	27	3	30	2.22	-	0.84	0.54	T.	7	13	2	15
Campbell.	Wilkin.	984	6	45.2	-	82	4	17	17	53	3.69	-	1.20	0	8	15	4	11	
Cass Lake.	Cass.	1,300	5	-	-	-	-	-	-	-	0.83	-	0.50	T.	3	-	-	-	
Collegeville.	Stearns.	1,282	19	47.4	+ 2.7	79	5	24	7	45	1.64	-	0.35	0.46	0.2	6	12	7	11
Crookston.	Polk.	863	23	43.7	+ 1.9	75	4	15	1	40	1.58	-	0.32	0.70	T.	8	16	6	8
Detroit.	Becker.	1,364	16	45.4	+ 5.8	78	4†	15	27	46	1.26	-	0.58	0.80	T.	5	18	4	8
Ely.	St. Louis.	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Fairmont (near).	Martin.	1,240	25	47.6	+ 2.5	75	12	28	1†	32	2.91	+ 0.08	1.15	0	7	13	11	6	s.
Faribault.	Rice.	1,003	14	47.2	+ 2.5	70	9	25	6	37	3.08	+ 1.41	1.50	0	4	17	11	2	ne.
Farmington.	Dakota.	902	24	47.8	+ 2.7	77	5	25	7†	40	2.11	-	0.33	1.10	0.5	6	12	5	13
Fergus Falls.	Ottertail.	1,210	20	47.6	+ 4.4	75	4†	23	7	38	1.93	-	0.13	1.13	0.1	9	12	7	se.
Fort Ripley.	Crow Wing.	1,136	4	43.8	-	79	5	16	1	46	0.40	-	1.64	0.40	0	1	12	0	18
Fosston.	Polk.	1,289	2	44.2	-	75	4	19	22†	42	11.16	-	7.07	T.	4	13	12	5	nw.
Glencoe.	McLeod.	1,000	15	49.7	+ 4.5	77	6	26	7	40	1.95	-	0.06	0.75	0	4	18	12	0
Grand Meadow.	Mower.	1,338	24	46.2	+ 1.8	70	5†	24	7	35	3.14	+ 0.79	1.70	1.7	0	9	10	12	8
Gull Lake Dam.	Cass.	1,215	1	41.4	-	75	5	20	17	40	1.62	-	0.69	0	5	11	8	n.	
Hallock.	Kittson.	815	13	42.4	+ 1.9	81	4	15	27	45	2.17	+ 0.93	0.50	1.0	0	9	20	1	9
Halstadn.	Norman.	870	6	43.9	-	86	5	17	1	58	1.54	-	0.66	0.66	0	7	20	3	7
Hinckley.	Pine.	1,050	7	45.0	-	77	5	22	1†	46	1.82	-	0.50	0.50	0	1	12	7	10
International Falls.	Koochiching.	1,112	9	41.1	-	76	4	20	1†	38	1.90	-	1.02	T.	4	8	11	1	e.
Itasca State Park.	Clearwater.	1,500	1	44.6	-	78	5	6	1	52	2.19	-	0.99	T.	5	13	11	6	e.
Lake Crystal.	Blue Earth.	1,448	4	48.3	-	79	5	27	7	37	2.20	-	1.23	0	4	15	7	8	nw.
Leech Lake Dam.	Cass.	1,301	24	42.6	+ 2.9	78	5	18	17†	43	1.10	-	0.79	0.69	0	6	3	20	7
Littlefork.	Koochiching.	2	39.8	-	72	4	15	1†	45	1.41	-	0.95	0	7	7	17	6	....	
Long Prairie.	Todd.	1,299	20	45.4	+ 2.														

TABLE 1.—Climatological data for April, 1912. District No. 5—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.								Precipitation, in inches.								Sky.	Prevailing wind direction.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeted.	Number of rainy days, 0.01 inch or more.	Number of partly cloudy days.	Number of clear days.	Number of cloudy days.				
<b>Minnesota—Contd.</b>																						
Rochester.....	Olmstead.....	991	7	49.6	.....	74	5†	24	3	40	1.77	.....	0.75	T.	5	16	4	10	se.	Mary P. Cram.		
St. Charles.....	Winona.....	850	21	48.2	+ 3.1	72	5	25	3	38	2.54	- 0.03	1.18	T.	7	16	3	11	se.	S. W. Gleason.		
St. Cloud.....	Sherburne.....	1,020	35	47.8	+ 3.8	81	5	24	1	44	2.96	+ 0.61	0.88	T.	8	14	8	8	se.	J. H. Capser.		
St. Paul.....	Ramsey.....	940	41	49.0	+ 3.3	77	5	28	7	32	2.60	+ 0.27	1.14	1.0	7	13	12	5	se.	U. S. Weather Bureau.		
St. Peter.....	Nicollet.....	825	17	49.5	+ 2.9	80	5	27	8	40	1.70	- 0.18	0.75	0	5	14	8	8	s.	State Hospital.		
Sandstone.....	Pine.....	43.8	.....	77	5	16	1	40	2.10	.....	1.50	1.0	0	3	5	14	11	sw.	A. D. Hale.			
Sandy Lake Dam.....	Aitkin.....	1,234	19	43.2	+ 3.2	77	5	20	17	46	2.11	+ 0.02	0.78	0	7	5	18	7	nw.	A. Newstrom.		
State Sanatorium.....	Cass.....	44.0	.....	74	5†	21	7†	43	0.99	.....	0.80	0	4	9	11	10	ne.	Dr. L. B. Ohlinger.				
Stillwater.....	Washington.....	694	6	44.0	.....	78	5	20	1†	38	1.78	.....	0.52	T.	7	20	2	8	s.	Oscar Ostrom.		
Taylor's Falls.....	Chicago.....	759	5	48.2	.....	78	5	27	52	52	2.67	.....	0.95	1.5	6	17	7	6	nw.	Minneapolis General Elec. Co.		
Thief River Falls.....	Pennington.....	1,137	1	44.9	.....	78	3	15	27	52	1.83	.....	0.83	T.	4	13	3	14	n.	E. W. Lown.		
Tracy.....	Lyon.....	45.6	.....	86	5	19	1	48	3.46	.....	1.10	0	6	17	0	13	w.	B. L. English.				
Warren.....	Marshall.....	859	44.6	.....	82	4	19	27	51	0.86	.....	0.30	0	5	15	10	5	.....	P. H. Holm.			
Warroad.....	Roseau.....	1,069	2	39.4	.....	76	4	15	22	43	2.21	.....	1.06	0.5	8	17	4	9	e.	J. H. Sawyer.		
Winnebago.....	Faribault.....	1,100	14	48.0	+ 2.5	81	5	29	1†	39	1.84	- 0.18	1.00	0	7	16	4	10	se.	H. H. Haught.		
Winnibigoshish.....	Itasca.....	1,300	24	43.4	+ 3.8	77	5	21	7†	44	0.99	- 0.80	0.68	0.2	5	12	6	12	nw.	John Duncan.		
Winona.....	Winona.....	700	16	50.9	+ 4.1	79	5	24	3	41	2.48	- 0.05	0.82	0.4	10	15	5	10	sw.	P. C. Myers.		
Worthington.....	Nobles.....	1,593	17	45.8	+ 0.8	70	11	20	1	40	1.75	- 0.43	0.69	0	9	15	4	11	s.	M. P. Mann.		
Zumbrota.....	Goodhue.....	917	16	48.3	+ 2.6	75	5	26	7	39	2.25	.....	1.34	0.8	5	13	10	7	sw.	W. C. Rowell.		
<b>South Dakota.</b>																						
Milbank.....	Grant.....	1,148	21	46.8	+ 2.8	83	4	17	1	55	4.40	+ 2.28	1.58	.....	8	18	1	11	nw.	I. T. Partridge.		
Sisseton.....	Roberts.....	1,202	6	48.4	.....	75	3	24	1	38	6.84	.....	3.66	.....	7	16	0	14	n.	George Gray.		
<b>Wisconsin.</b>																						
Antigo.....	Langlade.....	1,489	18	43.8	+ 1.6	72	5	21	1	36	2.54	.....	1.10	0	5	18	0	14	w.	Elton C. Larzelere.		
Barron.....	Barron.....	1,115	21	46.6	+ 4.4	74	5	21	1	43	2.90	+ 0.54	1.00	0	5	15	11	4	w.	Wm. A. Kent.		
Beloit.....	Rock.....	750	46	48.0	+ 0.5	72	11	25	19	36	2.41	- 0.36	1.32	8.0	6	18	8	4	n.	Smith Observatory.		
Big St. Germain Dam.....	Vilas.....	1,590	24	41.0	.....	72	5	11	1	45	3.29	.....	1.13	0	10	14	10	6	n.	Fred Hessen.		
Brodhead.....	Green.....	812	14	49.0	+ 2.0	75	14	23	19	40	2.77	- 0.21	1.00	12.0	6	17	9	4	sw.	Hector D. Kirkpatrick.		
Burnett.....	Dodge.....	880	8	46.8	.....	72	14	25	3	36	1.45	.....	0.41	2.2	7	10	12	7	sw.	Geo. W. Smith.		
Cottage Grove.....	Dane.....	888	1	41.0	.....	75	5†	20	3†	42	2.00	.....	1.81	0.55	3.8	11	11	15	4	sw.	John E. Mellish.	
Darlington.....	Lafayette.....	867	6	48.2	.....	75	5†	20	3†	42	2.24	.....	1.30	13.0	4	17	2	11	s.	F. J. O'Neill.		
Deerskin Dam.....	Forest.....	1,625	27	37.4	.....	70	5	10	1†	48	2.24	.....	0.91	T.	9	10	14	6	sw.	Wm. E. O'Neal.		
Delavan.....	Walworth.....	920	21	47.2	+ 1.1	73	14	22	19	38	2.38	- 0.64	0.88	10.0	9	12	6	12	sw.	Elwood S. Austin.		
Dodgeville.....	Iowa.....	1,116	12	49.34	+ 4.2	71	11	25†	19	37†	2.52	- 0.22	1.10	0	4	9	4	17	se.	Thomas Gibbon.		
Downing.....	Dunn.....	933	10	45.8	+ 2.6	75	5	22	1†	40	2.52	- 0.41	0.94	0.4	8	11	13	6	nw.	Eugene F. Stoddard.		
Eau Claire.....	Eau Claire.....	800	21	48.9	+ 3.3	79	5	23	3	40	2.99	+ 0.41	1.04	0.4	6	15	6	9	sw.	Robert D. Whiford.		
Grain Rapids.....	Wood.....	1,021	13	46.0	+ 1.9	75	5	20	3†	42	2.42	- 0.13	0.85	T.	6	15	6	9	sw.	Willis B. Raymond.		
Grantsburg.....	Burnett.....	1,095	21	46.1	+ 3.0	78	6	22	19†	40	1.58	- 1.20	0.70	1.0	5	17	6	7	se.	Theodore Olsen.		
Hancock.....	Waushara.....	1,091	20	48.0	+ 3.5	75	5	23	19†	37	1.95	- 0.63	1.00	T.	5	17	4	9	sw.	Frederick B. Hamilton.		
Hatfield.....	Jackson.....	973	18	48.2	+ 1.3	78	5	18	3	42	2.53	+ 0.05	0.75	3.5	6	11*	10*	8*	sw.	Walter S. Woods.		
Hayward.....	Sawyer.....	1,197	21	44.9*	+ 3.2	76*	5	19	1	43	2.18	+ 0.14	0.75	3.5	6	11*	10*	8*	sw.	Wm. T. Swain.		
Hillsboro.....	Vernon.....	1,000	21	46.4	+ 1.8	72	5	22	19	41	1.96	- 1.01	0.67	T.	4	13	16	1	sw.	Emil V. Wernick.		
Koepenick.....	Langlade.....	1,688	21	41.6	- 0.1	70	5†	12	3	40	4.89	+ 2.18	1.00	0	7	5	18	7	sw.	Edward S. Koepenick.		
Lac du Flambeau.....	Villas.....	2	39.9	.....	69	5	14	1	44	3.13	.....	0.98	0.5	0	6	17	7	6	s.	W. J. Lovett.		
La Crosse.....	La Crosse.....	714	40	49.6	+ 2.3	75	5	26	3	35	3.12	+ 0.83	1.13	0.1	10	11	5	14	s.	U. S. Weather Bureau.		
Lake Mills.....	Jefferson.....	897	21	47.0	+ 1.3	73	11	27	19†	35	1.64	- 2.42	0.53	2.9	9	12	12	6	sw.	Newton Dexter Smith.		
Lancaster.....	Grant.....	1,070	21	48.2	+ 1.6	72	5†	24	3	37	1.92	- 1.03	0.65	3.0	6	11*	7*	11*	w.	Edward Pollock.		
Long Lake.....	Oneida.....	1,592	4	39.5	.....	72	5	9	3†	50	2.84	.....	1.06	T.	11	11	11	8	s.	Louis Frank.		
Madison.....	Dane.....	974	43	46.7	+ 2.2	71	14	27	3	32	1.48	- 0.90	0.44	3.4	11	9	13	8	sw.	U. S. Weather Bureau.		
Mather.....	Juneau.....	962	8	46.5	.....	75	5	21	3	48	2.18	.....	0.54	0	7	12	6	12	e.	Frank Evans.		
Mauston.....	do.....	882	16	45.2	+ 0.2	74	11	18	19	40	1.80	- 0.60	0.60	T.	6	16*	5*	8*	sw.	Eugene L. Hitchcock.		
Meadow Valley.....	Taylor.....	974	21	46.6	+ 1.7	77	5	20	19	43	1.98	- 0.51	0.94	0	6	5	16	9	nw.	Charles H. Johnson.		
Meredith.....	Lincoln.....	1,420	23	44.6	+ 2.5	72	5	21	19	38	3.88	+ 1.62	1.55	0	8	21	5	5	nw.	Wm. Zeit.		
Minocqua.....	Oneida.....	1,604	8	41.2	.....	70	5	15	1	41	3.73	.....	1.08	0	7	13*	10*	6*	sw.	J. M. Wilson.		
Mondovi.....	Buffalo.....	738	4	48.0	.....	76	5	23	3	40	2.64	.....	0.73	1.0	8	18	2	10	sw.	Benjamin A. Applebee.		
Mount Horeb.....	Dane.....	1,226	8	47.1	.....	73	11	24	19	38	1.86	.....	0.50	6.0	7	15	4	11	s.	Dr. Charles Hebard.		
Muscooda.....	Grant.....	666	3	43.9	.....	76	11	25	3†	50	1.39	.....	0.53	0	6	19	4	7	sw.	W. M. Lewis.		
Neillsville.....	Clark.....	996	22	46.8	+ 2.6	78	5	18	6	42	2.28	- 0.56	1.00	0	5	19	0	11	nw.	Wm. Heaslett.		
New Richmond.....	St. Croix.....	990	7	47.4	.....	80	5	22	1	42	2.23	.....	1.20	1.0	5	13	14	3	sw.	Franc. A. R. Van Meter.		
Osceola.....	Polk.....	806	21	47.6	+ 4.2	74	5†	23	1	43	2.43	+ 0.10	1.00	2.0	5	15	8	7	sw.	Charles W. Staples.		
Portage Falls.....	Price.....	1,492	21	44.48	.....	73b	5	18b	2	35b	2.46	.....	0.90	0	5	18*	3b	7b	sw.	Flamebeau Paper Co.		
Portage.....	Columbia.....	809	23	48.9	+ 2.6	74	11	25	3	35	1.63	- 1.18	0.54	0.5								

TABLE 1.—Climatological data for April, 1912. District No. 5—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelting.	Number of rainy days, 0.01 inch or more.	Number of partly cloudy days.	Number of clear days.				
<i>Iowa—Continued.</i>																					
Baxter.	Jasper.	998	12	49.8	+ 1.0	78	5	25	3	38	2.18	- 0.69	0.56	T. 12	15	9	6	sw.	W. R. Vandike.		
Belle Plaine.	Benton.	828	22	50.2	+ 1.3	74	10	24	3	40	1.98	- 1.32	0.37	3.5	9	11	10	se.	S. P. Van Dike.		
Belmond.	Wright.	2	48.2	52.3	75	5	25	3	38	3.13	- 1.34	0	4	2	18	10	sw.	Geo. P. Hardwick.			
Bloomfield.	Davis.	5	52.3	52.3	75	5	28	3	36	3.61	- 0.86	4.6	9	18	2	10	sw.	Albert Power.			
Bonaparte.	Van Buren.	21	50.8	+ 0.6	74	11	23	7	32	2.91	- 0.44	0.95	5.0	9	10	10	sw.	B. R. Vale.			
Boone.	Boone.	1,134	7	49.0	52.0	75	5	27	3	32	2.36	- 0.87	0	7	14	5	11	.....	C. F. Henning.		
Britt.	Hancock.	1,236	15	48.2	+ 2.5	80	24	25	3	44	3.94	+ 1.73	1.75	0	7	9	15	6	se.	L. M. Goodman.	
Buckingham.	Tama.	12	51.6	+ 0.1	76	5	27	3	33	2.10	- 0.88	0.88	T. 6	6	9	15	6	sw.	J. S. Guynn.		
Burlington.	Des Moines.	544	16	51.6	+ 0.1	76	5	27	3	33	2.30	- 1.06	0.85	7.0	5	15	5	10	sw.	Max. E. Poppe, jr.	
Carroll.	Carroll.	1,265	22	47.8	- 0.3	74	12	25	7	43	1.90	- 0.90	1.00	T. 6	6	13	6	11	nw.	Mrs. Jos. J. Wolfe.	
Cedar Rapids.	Linn.	733	30	49.1	- 0.6	75	5	26	3	45	2.30	+ 0.46	1.80	T. 6	6	9	8	13	s.	R. S. Toogood.	
Charles City.	Floyd.	1,015	21	48.2	+ 1.9	73	5	26	3	39	2.48	- 0.37	0.78	T. 6	6	9	8	13	s.	U. S. Weather Bureau.	
Clear Lake.	Cerro Gordo.	1,241	14	48.9	+ 1.9	74	10	25	3	37	1.80	+ 0.16	1.10	0	3	22	1	7	s.	Oscar Stevens.	
Columbus Junction.	Louisa.	595	11	52.0	+ 2.3	81	14	28	3	32	2.75	- 0.03	1.00	4.1	8	20	5	5	sw.	J. B. Johnston.	
Davenport.	Scott.	580	41	51.2	+ 1.0	74	11	31	3	31	2.76	- 0.12	1.17	7.8	8	10	12	8	sw.	U. S. Weather Bureau.	
Decorah.	Winneshiek.	875	19	47.9	+ 0.2	73	11	20	3	42	1.85	- 0.65	0.67	0	7	7	7	7	se.	F. H. Baker.	
Delaware.	Delaware.	1,083	21	48.4	+ 2.6	73	12	30	3	34	2.34	- 0.44	1.03	3.5	9	11	10	12	3	sw.	William Ball.
Des Moines.	Polk.	861	34	51.4	+ 0.7	74	5	32	3	28	2.75	- 0.23	1.25	T. 11	10	10	10	12	s.	U. S. Weather Bureau.	
Dubuque.	Dubuque.	639	39	49.8	+ 0.7	73	5	27	3	32	2.49	- 0.43	0.81	5.0	10	10	10	12	s.	Do.	
Earlham.	Madison.	10	50.1	+ 2.3	74	5	26	3	34	3.73	+ 0.07	0.90	0	11	15	5	10	se.	George Phillips.		
Elkader.	Clayton.	727	33	48.8	+ 0.8	72	4†	22	3	40	1.76	- 0.93	0.75	0	7	14	7	9	se.	Chas Reinecke.	
Elma.	Howard.	2	48.0	72k	12	27k	19	34k	3	38	2.65	+ 0.44	0.80	0	9	11	11	11	sw.	H. C. Johnson.	
Estherville.	Emmit.	1,298	17	46.4	+ 0.1	78	5	26	3	38	1.87	- 0.40	0.49	4.0	8	18	2	10	sw.	A. O. Peterson.	
Fairfield.	Jefferson.	28	51.4	+ 1.6	73	5†	28	3	29	3.67	+ 0.19	0.87	T. 7	13	8	9	5	nw.	R. M. McKenzie.		
Fayette.	Fayette.	1,003	22	48.1	+ 1.6	73	5†	22	3	44	1.71	- 1.31	0.45	0	9	15	5	10	s.	R. Z. Latimer.	
Forest City.	Winnebago.	1,226	18	47.6	+ 1.1	78	11	26	7	38	2.12	- 0.25	1.12	T. 11	16	9	7	7	sw.	J. A. Peters.	
Fort Dodge.	Webster.	1,126	12	49.0	+ 1.6	76	5	29	3	41	2.06	- 1.11	1.00	0	6	7	7	7	sw.	F. J. Monk.	
Fort Madison.	Lee.	516	63	.....	.....	.....	.....	.....	.....	.....	2.54	- 0.64	0.70	7.0	7	8	11	11	sw.	Miss L. A. McCready.	
Gilman.	Marshall.	1,052	13	.....	.....	.....	.....	.....	.....	.....	1.33	- 1.03	0.35	0	9	10	13	7	sw.	J. L. Wylie.	
Grand Meadow.	Clayton.	1,180	21	48.3	+ 1.5	71	4†	26	3	35	1.43	- 1.54	0.43	0	8	10	11	12	7	sw.	F. L. Williams.
Grinnell.	Poweshiek.	1,023	20	50.9	+ 0.6	77	5	25	3	35	2.22	- 1.16	0.55	0.2	10	11	12	7	sw.	D. W. Brainard.	
Grundy Center.	Grundy.	976	21	50.2	+ 2.8	74	5	26	3	41	1.50	- 1.55	0.75	0	5	22	3	7	sw.	J. B. Calderwood.	
Guthrie Center.	Guthrie.	1,077	17	50.6	+ 1.3	75	5	28	3	40	2.92	+ 0.18	1.00	T. 11	16	9	7	7	sw.	D. G. Beardsley.	
Hampton.	Franklin.	1,155	22	49.6	+ 2.3	77	5	26	3	33	2.36	- 0.92	0.95	0	6	7	14	9	sw.	E. C. Grenelle.	
Independence.	Buchanan.	921	48	49.0	- 0.4	74	5	25	3	38	1.83	- 0.55	0.50	T. 8	15	9	6	sw.	R. E. Dudley.		
Indianola.	Warren.	969	21	49.0	- 1.7	74	5	30	3	29	3.57	+ 0.17	0.85	T. 10	5	8	17	6	se.	Prof. J. L. Tilton.	
Iowa City.	Johnson.	683	52	49.0	+ 0.5	74	5	25	3	42	3.50	+ 0.36	1.00	5.0	11	11	8	11	sw.	Prof. A. G. Smith.	
Iowa Falls.	Hardin.	1,170	19	47.6	+ 0.9	72	5†	24	3	40	2.83	- 0.05	1.03	0	9	15	3	12	nw.	J. B. Parnelee.	
Jefferson.	Greene.	13	50.0	50.0	76	5	28	3	39	2.18	- 0.42	0.88	0	7	10	11	9	nw.	Ora M. Hall.		
Keokuk.	Lee.	547	41	53.0	+ 1.0	76	5	30	3	31	2.41	- 0.93	0.93	6.0	10	11	11	8	sw.	U. S. Weather Bureau.	
Keesauqua.	Van Buren.	644	20	51.3	- 0.3	77	5†	25	3	44	2.49	- 1.20	0.53	5.5	9	6	10	8	sw.	J. H. Landes.	
Knoxville.	Marion.	920	17	51.9	+ 0.7	76	6	28	3	37	2.08	- 1.27	0.70	0	6	10	12	8	sw.	Casey and Bellville.	
Lacona.	Warren.	13	.....	.....	.....	.....	.....	.....	.....	.....	2.44	- 0.52	1.25	2.0	8	7	17	6	se.	J. B. Alter.	
Le Claire.	Scott.	576	12	.....	.....	.....	.....	.....	.....	.....	3.99	+ 1.62	1.55	8.6	12	14	5	11	sw.	Miss M. T. Disney.	
Marshalltown.	Marshall.	947	20	50.5	+ 1.7	77	5	25	3	43	2.09	- 0.81	0.49	0	14	14	5	11	sw.	Ralph B. Reasoner.	
Mason City.	Cerro Gordo.	1,132	15	48.0	+ 0.3	74	5	24	3	40	3.15	+ 0.30	1.63	0	4	12	8	10	s.	J. S. Mills.	
Monroe.	Jasper.	500	.....	.....	.....	.....	.....	.....	.....	.....	3.60	- 0.75	0.75	7	16	5	9	8	sw.	J. A. Dibel.	
Mount Pleasant.	Henry.	729	31	51.5	+ 0.4	75	11	22	1	36	3.08	- 0.13	0.95	6.7	11	13	9	8	sw.	J. W. Edwards.	
Muscatine.	Muscatine.	52	.....	.....	.....	.....	.....	.....	.....	.....	2.49	- 0.92	1.15	5.0	9	10	9	8	sw.	William Molis.	
New Hampton.	Chickasaw.	1,169	15	48.2	+ 1.3	72	5	25	3	37	1.24	- 0.71	0.36	0	4	16	7	7	s.	A. F. Kemman.	
Northwood.	Worth.	1,122	16	48.0	+ 1.5	72	5	25	3	34	1.98	+ 2.82	1.83	0	7	14	9	7	nw.	Chas. H. Dwelle.	
Olin.	Jones.	760	14	49.8	+ 2.9	75	11	27	19	40	2.81	+ 0.53	1.32	8.0	5	15	12	3	nw.	Dr. F. W. Port.	
Osage.	Mitchell.	1,184	25	48.2	+ 2.8	74	5	25	3	37	2.63	+ 0.23	1.04	0	6	18	5	9	se.	Lester Coonradt.	
Oskaloosa.	Mahaska.	843	36	51.0	+ 1.0	78	13	26	3	37	2.04	- 0.69	0.50	3.5	7	17	2	11	nw.	Joseph Boyd.	
Ottumwa.	Wapello.	649	17	51.5	- 0.5	77	5	30	3	32	1.53	- 1.62	0.82	0.9	5	15	6	6	sw.	Chester Potter.	
Pella.	Perry.	877	10	50.8	+ 1.0	75	5†	24	3	34	2.16	- 0.36	0.53	0.2	9	22	4	4	s.	J. H. Ver Steeg.	
Perry.	Dallas.	975	11	50.6	+ 3.3	75	5	29	3	39	2.17	- 0.76	0.76	0	8	14	9	7	se.	S. J. Brumfield.	
Plover.	Pocahontas.	1,426	16	48.6	75	5	28	3	34	2.51	- 0.55	0.45	1.15	0	7	19	5	6	nw.	J. S. Smith.	
Pocahontas.	do.	1,248	8	48.6	75	5	28	3	30	3.02	+ 0.68	1.26	1.36	0.3	8	15	9	6	s.	F. E. Hronek.	
Ridgeway.	Winneshiek.	1,215	14	49.8	+ 2.2	74	5	26	3	36	2.83	- 0.68	1.26	0.1	10	15	10	5	s.	Arthur Betts.	
Rockwell City.	Caihoun.	16	50.2	+ 3.2	75	5†	28	1	39	2.57	- 0.19	1.05	0	4	15	5	10	se.	C. M. Randall.		
Sac City.	Sac.	1,278	36	49.2	+ 1.5	75	5	27	7	31	2.32	- 0.74	1.63	0	3	17	1	17	sw.	E. N. Baily.	
St. Charles.	Madison.	1,070	11	51.1	+ 0.5	76	5	28	3	34	3.96	+ 0.42	1.08	0	10	15	6	9	s.	R. D. Minard.	
Sigourney.	Keokuk.	877	16	50.4	- 0.8	75	5†	25	3	35	3.83	+ 0.66	1.00	2.0	13	1	26				

TABLE 1.—Climatological data for April, 1912. District No. 5—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years	Temperature, in degrees Fahrenheit.						Precipitation, in inches.						Sky.	Prevailing wind direction.	Observers.		
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmeasured.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.			
<i>Illinois.</i>																				
Aledo.	Mercer.	738	12	51.8	+ 2.0	74	11	27	3	31	2.95	+ 0.07	1.20	9.0	8	11	12	7	nw.	William B. Frew.
Alexander.	Morgan.	670	19	54.1	+ 1.2	77	5	27	3	31	4.77	+ 1.83	5.54	T.	11	10	12	8	sw.	George H. Hall.
Antioch.	Lake.	861	11	46.8	+ 1.9	75	11†	20*	19	32*	2.69	- 0.63	1.40	10.0	6	11	11	8	w.	J. C. James.
Astoria.	Fulton.	650	13	52.4b	+ 1.8	77*	5	28*	19	31b	5.93	+ 2.23	1.65	1.0	10	12	11	7	sw.	Edward V. Bohl.
Aurora.	Kane.	687	33	48.8	+ 0.9	77*	14	25	3†	40*	2.63	- 0.33	1.03	1.0	8	7	11	12	sw.	W. Holden.
Beardstown.	Cass.	442									5.60	+ 2.28	1.05	2.0	13					
Bement.	Piatt.	700	5	54.3		77	14	30	19	36						12	11	7	s.	
Bloomington.	McLean.	840	21	53.2	+ 1.6	77	12†	29	3	36	6.36	+ 2.51	2.21	T.	8	14	2	14	s.	Rev. C. S. Adams.
Cairo.	Alexander.	359	40	59.0	+ 0.7	78	15	40	18	19	5.91	+ 2.34	1.70	0	5	8	6	10	s.	Prof. H. N. Pearce.
Carbondale.	Jackson.	412	7	59.4		86	15	31	8	36	6.38		3.31	0	14	11	9	10	sw.	U. S. Weather Bureau.
Carlinville.	Macoupin.	603	22	56.2	+ 2.2	79	5†	29	3	32	8.60	+ 4.45	1.90	T.	11	11	15	4	nw.	State Normal University.
Carlyle.	Clinton.	470	27																	W. T. Eddy.
Chester.	Randolph.	380	20																	Hervey O. Jones.
Clinton.	Dewitt.	727	2	53.4		75	14	30	3	32	8.49		2.61	T.	11	14	10	6	sw.	F. A. Golton.
Coatsburg.	Adams.	763	20	53.4	+ 1.0	77	11	31	3	33	6.02	+ 2.16	1.77	1.0	10	12	8	10	n.	J. Frank Ziegler.
Cobden.	Union.	656	29	59.4	+ 2.5	86	15	36	3†	32	6.85	+ 2.18	1.94	0	13	7	10	13	s.	Dr. J. R. Lambert.
Dakota.	Stephenson.	929	7	48.4		73	11	24	19	37	6.09		0.50	5.0	7	10	15	5	sw.	John Buck.
Decatur.	Macon.	685	21	53.8	+ 1.7	77	14	30	3	42	6.80	+ 3.51	2.13	T.	12	15	11	4	sw.	Rev. G. W. Kerstetter.
Dixon.	Lee.	725	22	49.2	+ 0.5	75	5	24	19	47	3.07	+ 0.28	0.93	8.0	9	14	11	5	sw.	Prof. J. H. Coonradt.
Du Quoin.	Perry.	459	24	58.3	+ 2.2	81	14†	32	8	32	6.58	+ 2.55	3.32	0	10	13	7	10	sw.	H. U. Bardwell.
Dwight.	Livingston.	600	19	51.0	+ 1.6	76	14	28	3	37	6.68	+ 1.78	1.37	0.5	11	12	5	13	sw.	G. H. Knetzger.
East St. Louis.	St. Clair.	418	2																Edward O. Welch.	
Edwardsville.	Madison.	554	13																W. McK. Brown.	
Elgin.	Kane.	716	5	49.6*		75*	14	25*	19	37b	2.55		8.07	+ 3.83	1.60	0	17			W. H. Morgan.
Ewing.	Franklin.	449	1																Ewing Observatory.	
Fairview.	Fulton.	733	1																Abram Wilson.	
Galva.	Henry.	842	20	49.6	+ 0.1	75	11	27	3†	45	4.65	+ 1.60	2.18	14.5	11	17	2	11	sw.	Prof. F. U. White.
Grafton.	Jersey.	422	19																M. C. Goodrich.	
Greenville.	Bond.	635	34	56.2	+ 1.3	79	14	32	2†	34	7.42	+ 3.19	1.65	0	15	12	5	13	sw.	M. S. Oudyn.
Griggsville.	Pike.	650	27	54.8	+ 0.8	78	5	31	3	31	4.45	+ 0.79	1.70	T.	6	18	5	7	sw.	George F. Kneeland.
Havana.	Mason.	475	20	55.0*	+ 1.9	79*	5†	29b	3	32b	5.09	+ 1.73	1.48	T.	10	13	4	4	s.	F. and C. Borgelt.
Henry.	Marshall.	500	24	51.6	+ 1.5	75	4†	27	3	37	4.87	+ 1.63	1.73	8.0	11	15	7	8	sw.	Dr. F. A. Powell.
Hillsboro.	Montgomery.	675	18	54.7	+ 1.6	78	5	30	3	44	7.64	+ 3.83	1.05	T.	14	17	12	12	s.	Ira L. Woodward.
Joliet.	Will.	541	21	48.6	+ 0.0	77	14	25	19	38	2.77	+ 0.03	1.26	2.5	10	12	8	10	se.	F. M. Muhlig.
Kishwaukee.	Winnebago.	730	24	49.0	+ 1.3	73	11†	26	19	37	2.87	+ 0.37	0.96	7.0	12	13	11	6	sw.	George Stevens.
La Grange.	Cook.	657	20	49.4	+ 1.7	78	14	27	3†	35	2.91	+ 0.12	0.77	0.5	7	17	6	7	sw.	Prof. F. E. Sanford.
La Harpe.	Hancock.	698	33	52.4	+ 1.1	76	5†	27	3	36	2.20	- 1.29	0.74	5.0	10	19	6	5	nw.	George E. Campbell.
Lanark.	Carroll.	583	23	48.8	+ 1.3	74	11	20	19	36	1.77	- 1.40	0.62	6.5	10	18	7	5	sw.	M. N. Wertz.
La Salle.	La Salle.	536	33	50.6	+ 0.8	74	14	31	18	32	2.98	- 0.12	1.29	5.5	9	11	9	10	sw.	U. S. Weather Bureau.
Lincoln.	Logan.	482	24	54.2	+ 2.1	76	5†	26	19	34	5.07	+ 2.06	1.58	T.	11	17	4	9	s.	Prof. C. S. Oglevee.
Loami.	Sangamon.	624	12								5.42	+ 2.13	1.43	T.	8	13	3	14	se.	H. C. Foster.
Macomb.	McDonough.	700	8								3.90		1.25	5.0	10					State Normal University.
Manteno.	Kankakee.	711	1								3.64		1.13	T.	12	16	6	8	s.	J. F. Schmeltzer.
Martinton.	Iroquois.	633	25	51.0	+ 1.6	79	11†	27	3	44	3.87	+ 0.62	0.86	T.	10	15	2	13	sw.	Joseph H. Peltier.
Mascoutah.	St. Clair.	425	22	57.9	+ 3.6	82	14	31	8	36	1.65	+ 1.82	3.00	0	9	13	7	10	se.	George Henrich.
Minonk.	Woodford.	745	19	52.6	+ 2.4	77	11	30	3†	36	5.57	+ 2.58	1.50	1.5	10	16	4	10	s.	M. H. Pfaffle.
Monmouth.	Warren.	784	20	51.9	+ 0.9	77	13	26	3	34	3.98	+ 0.81	1.15	9.0	8	17	0	13	sw.	Dr. J. C. Hutchison.
Morris.	Grundy.	518	1	50.2		76	14	29	3†	39	3.44		1.09	4.0	9	15	4	11	s.	E. G. Cryder.
Morrison.	Whiteside.	685	18	50.0	+ 0.9	74	11	22	19	37	2.84	- 0.50	1.04	10.0	9	15	9	6	s.	S. A. Maxwell.
Morrisonville.	Christian.	638	13	54.8	+ 3.0	77	14	27	3	35	5.70	+ 2.04	1.28	T.	14	14	9	7	s.	J. D. Lewis.
Mount Vernon.	Jefferson.	511	18	57.6	+ 3.1	82	12†	31	3	47	3.81	+ 0.18	1.06	0	11	14	4	12	sw.	Theodore P. Stelle.
Nashville.	Washington.	503	12								5.60	+ 2.38	3.27	0	10					H. M. Potter.
Oregon.	Ogle.	702	3	49.5		73	14	26	19	36	3.52		1.00	6.0	9	13	7	10	sw.	Samuel Ray.
Ottawa.	Lasalle.	500	26	52.2	+ 1.6	77	11†	27	3	37*	3.30	+ 0.35	1.32	1.0	7	17	2	11	sw.	Miss Maude M. Harris.
Pana.	Christian.	692	26	56.2	+ 2.9	79	12	32*	3	35*	5.10	+ 1.29	1.15	1.5	10	16	4	10	nw.	C. W. Sibley.
Pearl.	Pearl.	609	56	51.5	+ 0.6	75	5	30	19	33	6.88	+ 3.60	2.39	4.5	8	16	6	6	s.	U. S. Weather Bureau.
Pontiac.	Livingston.	546	10	52.6	+ 2.2	75	5†	29	3	34	5.50	+ 1.36	1.58	T.	11	12	8	10	sw.	George Butterworth.
Quincy.	Adams.	481	6	53.9		78	24	31	3	36	3.88		0.65	0.4	10				sw.	Fred J. Brinkett.
Riley.	McHenry.	986	53	47.8	+ 2.0	74	14	26	19	35	2.42	- 0.28	0.85	6.0	10	7	12	11	sw.	John West James.
Roberts.	Ford.	774	1								4.82		1.29	T.	9	11	15	4	sw.	R. E. Bradbury.
Rockford.	Winnebago.	763	20	48.3	+ 0.3	73	5†	27	19	34	2.55	- 1.62	0.78	7.0	12	19	0	11	s.	H. F. Dyson.
Rushville.	Schuyler.	670	21	54.0	+ 1.2	77	5	32	3†	30	4.92	+ 0.87	1.54	T.	9	15	8	7	sw.	Dr. William H. Bishop.
St. Charles.	Kane.	700	17	49.4	+ 1.7	75	14	25	3	38	3.88	+ 0.74	1.08	2.0	2	10	15	5	sw.	M. L. Lansford.
St. Peter.	Fayette.	500	10	56.2	+ 2.6	80	12†	30	3	34	5.32	+ 1.81	2.05	0	11	8	14	8	sw.	James A. Caldwell.
Sparta.	Randolph.	538	26	58.0	+ 2.2	71	14	32	2	33	5.88	+ 1.71	2.66	1.0	16	12	8	10	s.	Section Center.
Springfield.	Sangamon.	644	32	54.6	+ 2.6	78	5	32	3	33	5.39	+ 2.08	1.33	T.	10	9	12	9	sw.	Miss Lora Sweetser.
Streator.	Lasalle.	626	19	51.8	+ 2.0	79	11	27	3	42	4.62	+ 1.62	1.63	2.1	13	19	2	9	sw.	C. A. Corbin.
Sullivan.	Moultrie.	530	12	55.4	+ 3.9</td															

TABLE 2.—*Daily precipitation for April, 1912. District No. 5, Upper Mississippi Valley.*

TABLE 2.—*Daily precipitation for April, 1912. District No. 5—Continued.*

Stations.	Watershed.	Day of month.																															
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	Total.	
<i>Minnesota—Contd.</i>																																	
State Sanitorium..	Mississippi.						T.	.01				T.			.05		.14	T.			.30	.32	T.			.80		.03				0.89	
Stillwater     ..	St. Croix.						T.	.22				T.			.08		.14	T.			.78	T.			.52		.20				1.78		
Taylors Falls     ..	do.						.24	.12				.20			.42			T.				.16			.95						2.67		
Thief River Falls     ..	Red.						T.					T.			.20	T.							T.			.83					1.83		
Tracy.....	Minnesota.						.50					T.			.10			T.													3.46		
Warren.....	Red.						T.					T.			.10			T.													0.86		
Warroad.....	Rainy.						.05					T.			.10			T.													2.21		
Winnebago     ..	Minnesota.						.04					T.			.10			T.													1.84		
Winnibigoshish.....	Mississippi.																														0.99		
Winona.....	do.						.45	.02																							2.48		
Worthington     ..	Dex Moines.						.21	.02																							1.75		
Zumbrota.....	Mississippi.						.18	T.																							2.25		
<i>South Dakota.</i>																																	
Milbank     ..	Minnesota.						.53																									4.40	
Sisseton     ..	do.																															6.84	
<i>Wisconsin.</i>																																	
Antigo.....	Wisconsin.						.40																									2.54	
Barron.....	Chippewa.						T.																								2.90		
Beloit.....	Rock.						.14																								2.41		
Big St. Germain Dam	Wisconsin.						.04	.02																						3.29			
Brodhead.....	Rock.						.25																								2.77		
Burnett.....	do.						T.	T.																							1.45		
Cottage Grove.....	do.						.01	T.																							1.81		
Darlington.....	do.						.07	.03																						2.00			
Deerskin Dam.....	Wisconsin.						.32																								2.24		
Delavan.....	Rock.						.15	T.																							2.38		
Dodgeville.....	do.																																
Downing.....	Chippewa.																															2.52	
East Claire.....	do.						.46	.04																							2.99		
Grand Rapids     ..	Wisconsin.							.22																							2.42		
Grantsburg.....	St. Croix.						.30	.10																							1.58		
Hancock.....	Wisconsin.						.10	T.																									
Hatfield.....	Black.						.43																									2.53	
Hayward.....	St. Croix.						.05	T.																							2.18		
Hillsboro.....	Wisconsin.																															1.96	
Koepnick.....	do.																															4.89	
Lac du Flambeau.....	Chippewa.						.90																								3.13		
La Crosse.....	Mississippi.						.02																								3.12		
Lake Mills.....	Rock.						.08																								1.64		
Lancaster.....	Mississippi.																															1.92	
Long Lake.....	Wisconsin.						.25	.03																							2.84		
Madison.....	Rock.						.02	T.																							1.48		
Mather     ..	Wisconsin.																															2.18	
Mauston.....	do.																															1.80	
Meadow Valley.....	do.																															1.98	
Medford.....	Black.						.25	T.																							3.88		
Merrill.....	Wisconsin.						.10																								4.49		
Minocqua.....	do.						.80	.02																							3.73		
Mondovi.....	Mississippi.						.47	.10																							2.64		
Mount Horeb.....	Rock.						.20																								1.86		
Muscosa     ..	Wisconsin.						.04																								1.39		
Neillsville.....	Black.						.42																								2.28		
New Richmond.....	St. Croix.						.10																								2.43		
Osceola.....	do.						.28																								2.46		
Park Falls.....	Chippewa.						.38	T.																							1.63		
Portage.....	Wisconsin.						.41	T.																							2.18		
Port Edwards.....	do.						.30	T.																							2.10		
Prairie du Chien     ..	Mississippi.						.04																								1.78		
Prairie du Sac.....	Wisconsin.						.17																								0.79		
Prentice.....	Chippewa.						* .06																							3.37			
Rhineland.....	Wisconsin.						.30																								3.28		
Shullsburg.....	Mississippi.						.08																								3.10		
Soton Springs.....	St. Croix.						.11																								2.94		
Spooner     ..	do.																															1.75	
Stanley.....	Chippewa.						.43	T.																							3.43		
Stevens Point.....	Wisconsin.																															2.81	
Sugar Camp Dam.....	do.						.45	T.																							3.52		
Trott Lake.....	do.						1.00	T.																						2.44			
Twin Lakes Dam.....	do.						.32																								2.36		
Valley Junction.....	do.						.31																								2.79		
Viroqua.....	Mississippi.						.10	.02																						2.40			
Vudesare.....	Wisconsin.																																
Watertown     ..	Rock.						.02	T.																							1.59		
Waukesha.....	Cedar.						.10	.03																						2.26			
Wausau.....	Wisconsin.						.32																								3.10		
Weyerhaeuser.....	Chippewa.						.26	.04																									

TABLE 2.—*Daily precipitation for April, 1912.* District No. 5—Continued.

TABLE 2.—*Daily precipitation for April, 1912. District No. 5—Continued.*

Stations.	Watershed.	Day of month.																													Total.				
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30				
<i>Illinois—Continued.</i>																																			
Clinton.....	Illinois.....	.43					.50							.50		.21			2.61	.09	T.		.71	.01				.56		.64	2.23	8.49			
Coatsburg.....	Mississippi.....	.50					.05							.75		.39			1.27		T.		.40	.02				.79		1.77	.08	6.62			
Cobden.....	do.....	.62	.81				T.	.43						.46	.14			.38	T.	.28		.08				.51			.36	1.94	.76	.08	6.85		
Dakota.....	do.....	.01					.01												.02		T.													0.69	
Decatur    .....	Illinois.....	.02	.65					.36							.03	.37	.20				.61	1.52			.11										6.80
Dixon    .....	Mississippi.....	.47					.35											.05																3.07	
Du Quoin.....	do.....	.52	.40					.11							.41	.01			T.	.40			.10											6.58	
Dwight.....	Illinois.....	.03	T.				.36							.18		.02			T.	1.19	.91	T.		.79	.05		.64	.06						4.68	
East St. Louis    .....	Mississippi.....	.05	.81	.08				.55						.02					T.															7.80	
Edwardsville.....	do.....	.16	.67				.10	.20	.20					.04					1.16	.03	.75												8.07		
Elgin.....	Illinois.....	.50					.15																												
Ewing.....	Mississippi.....																																		
Fairview.....	Illinois.....	.12					.10							T.		.80			.31			1.02	.11			.26	T.			.01	.48		1.36	.50	5.07
Galva    .....	do.....	.39	.02					.13						T.		.01	.48			T.	2.18	T.			.12	.17				.21		.09	.85		4.65
Grafton    .....	Mississippi.....	T.	.70					.66											.52	.33			.69	.26			.06	.11		.04					7.66
Greenville.....	do.....	.10	.47				.35							.03					.82	.30	.80			.25	.90				.42	.04				7.42	
Griggsville.....	Illinois.....						T.											T.	.35	T.															
Havana.....	do.....	.21					.24											.83		.20														5.09	
Henry.....	do.....	.18					.44	.04										.11		.31														4.87	
Hillsboro    .....	Mississippi.....	.60	.18				.21							.72	.25				.45	.78	T.		.26	.48										7.64	
Joliet.....	Illinois.....	.18	T.				.15							.04				.01																2.77	
Kishwaukee.....	Mississippi.....	.26					.23											.60	.09															2.87	
La Grange.....	Illinois.....	.66					.63											.14	T.	.04														2.91	
La Harpe.....	do.....	.22					.08							T.				.66	.08															2.20	
Lauark.....	Mississippi.....	.25	T.				.05											.20																1.77	
La Salle.....	Illinois.....	.34	T.				.14							T.				.06																2.93	
Lincoln.....	do.....	.37					.30											.45	T.	.09														5.07	
Loami.....	do.....	.38	T.				.20										.65	T.	.16															5.42	
Macomb.....	do.....	.20					.03											.58	.02															3.90	
Manteno.....	do.....	.08	T.				.20	.18									.10																3.64		
Martinton    .....	do.....	.22					.38											.50	.13															3.64	
Mascoutah.....	Mississippi.....	.07	.55				T.											.33	.61															6.15	
Minonk.....	Illinois.....	.07	T.				.52											.92	T.	.03														5.57	
Mounmouth.....	Mississippi.....	.49					.04											.48	.72															3.98	
Morris.....	Illinois.....	.20					.16											T.	.04	T.														3.44	
Morrison.....	Mississippi.....	.47					.12												.32															2.84	
Morrisonville.....	Illinois.....	.32	.21				.38							T.				.74	.02	.19													3.81		
Mount Vernon    .....	Mississippi.....	.35	.35					.16											.75															5.60	
Nashville.....	do.....	.01	.85					.10										.36	.07															3.52	
Oregon.....	do.....	.65					.50											.05																3.52	
Ottawa.....	Illinois.....	.28					.24											.05																3.30	
Pana.....	Mississippi.....	.26	.39				T.											.65	.02	T.														5.10	
Pearia.....	Illinois.....	.16					.11											1.79	.23	10														6.88	
Pontiac.....	do.....	.14	T.				.26											1.00	.07															5.50	
Quincy    .....	Mississippi.....	.21	T.					.13										.09	.12															3.88	
Riley.....	do.....	.36					.21											T.	.04	T.														2.42	
Roberts.....	Illinois.....	.14	T.				.52											.90	T.	.11														4.82	
Rockford    .....	Mississippi.....	.58	.07					.12										.02															2.55		
Rushville.....	Illinois.....	.04					.24											.45	.36															4.92	
St. Charles.....	do.....	.55	T.				.23											.06	.04															3.88	
St. Peter.....	Mississippi.....	.10	.85				.05							T.				.21	.20	T.														5.32	
Sparta.....	do.....	.08	.88				.01	.11						T.				.48	.24	.12													5.88		
Springfield.....	Illinois.....	.53					.14							T.				.43	.03	.14													5.39		
Streator    .....	do.....	.06	.02	T.			.05							T.				.10	.08	T.														4.62	
Sullivan.....	Mississippi.....	.42	.20					.31										.55	.40															5.03	
Sycamore    .....	do.....	.25	.22					.07										T.																2.16	
Tiskilwa.....	Illinois.....	.45	T.					.06										.01	.12															3.36	
Walnut.....	Mississippi.....	.47					.26					</																							

TABLE 3.—Maximum and minimum temperatures at selected stations for April, 1912. District No. 5, Upper Mississippi Valley.

Date.	North Dakota.										Minnesota.										Pine River Dam.		St. Paul.		Winnibigoshish.			
	Bottineau. §§		Devils Lake.		Lisbon. §§		Minot. §§		Pembina. §§		Collegeville.		Crookston. §§		Grand Meadow.		Montevideo. §§		Moorhead.		New Ulm. §§		Pine River Dam.		St. Paul.		Winnibigoshish.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	49	19	49	27	56	22	53	20	45	28	50	30	50	15	48	27	58	20	55	25	56	28	46	22	53	31	46	22
2....	57	26	56	25	56	22	59	25	58	18	49	26	47	23	40	28	51	25	51	26	48	28	47	27	44	30	47	26
3....	74	32	74	31	56	28	74	30	78	30	58	30	66	30	49	28	70	30	74	32	60	30	59	23	56	31	60	33
4....	74	32	75	43	85	32	75	41	73	40	77	41	75	35	68	39	84	45	82	39	73	33	74	34	71	41	76	37
5....	65	33	65	32	83	37	64	36	52	40	79	45	70	40	70	50	83	43	79	37	84	42	77	30	77	48	77	38
6....	46	29	40	29	44	36	47	30	52	32	75	30	41	33	59	35	42	38	41	29	45	43	64	29	60	31	70	30
7....	54	24	51	28	64	18	57	26	49	32	53	24	50	27	48	24	60	24	58	26	54	26	49	19	50	28	47	21
8....	64	27	65	32	86	24	70	31	55	30	69	32	70	33	55	31	81	31	80	34	71	33	64	22	69	38	65	21
9....	74	28	68	30	72	28	76	30	64	28	67	32	60	30	63	37	69	34	64	31	66	37	62	32	64	44	67	30
10....	72	31	68	37	83	37	71	32	68	34	74	41	68	35	68	34	81	55	76	37	76	38	79	36	73	41	67	36
11....	58	41	59	36	72	37	68	35	58	34	73	33	61	38	65	39	80	46	68	43	69	43	68	30	66	44	66	32
12....	46	30	51	33	72	32	47	35	46	32	58	36	55	37	70	37	75	35	62	34	72	42	48	38	68	44	52	37
13....	39	29	41	32	52	39	36	34	51	35	60	34	54	36	63	39	62	35	57	36	63	45	53	34	65	41	53	32
14....	34	33	41	31	56	41	34	32	40	34	62	43	55	35	67	46	55	40	55	36	60	41	49	35	66	47	50	35
15....	37	24	35	26	44	32	36	24	36	28	46	38	35	33	51	39	50	35	36	31	47	39	45	34	51	40	36	34
16....	46	19	45	21	48	31	44	18	51	28	43	30	46	30	39	31	39	32	47	30	42	33	43	29	42	34	45	27
17....	53	37	52	26	50	27	52	21	55	24	47	27	53	28	47	31	51	27	55	25	46	30	51	17	51	31	50	21
18....	56	29	55	30	62	25	55	27	59	23	54	27	55	31	52	29	58	30	58	31	55	17	55	30	57	25	56	
19....	59	34	57	35	62	29	58	30	62	31	62	35	62	35	57	29	62	30	64	28	62	31	56	28	64	36	66	26
20....	46	37	41	25	62	28	47	40	42	39	61	37	53	34	60	28	64	33	66	30	65	34	63	22	65	41	68	31
21....	50	18	44	24	55	29	51	21	60	26	58	35	50	26	64	37	45	39	52	28	54	36	58	22	54	35	52	33
22....	58	25	57	32	65	23	62	34	58	29	55	27	57	25	52	30	60	29	64	26	56	31	55	23	56	32	56	25
23....	56	32	54	35	67	27	33	27	58	36	65	35	55	35	65	30	60	33	60	28	71	34	60	23	68	40	54	30
24....	66	37	68	31	76	23	71	28	59	30	64	35	60	27	63	31	69	30	70	26	68	33	63	21	63	38	60	26
25....	66	36	74	40	76	39	60	35	70	34	60	48	70	40	67	45	63	40	66	33	68	40	60	29	70	50	58	38
26....	47	30	44	25	55	40	51	30	34	34	61	37	33	37	57	39	47	44	53	30	53	51	54	34	57	35	52	32
27....	57	22	46	21	55	22	61	27	42	17	51	25	48	22	58	26	54	27	50	22	57	29	50	25	54	31	50	22
28....	54	24	53	33	62	31	65	28	52	22	66	43	50	35	48	39	64	36	56	35	60	32	61	39	56	44	56	
29....	59	31	56	30	65	27	63	30	64	28	58	34	58	30	62	36	63	31	62	27	66	37	57	24	62	39	59	25
30....	71	35	59	42	66	37	70	39	58	36	59	36	55	38	63	39	60	40	54	44	64	41	59	30	63	43	61	27
Mns..	56.2	29.5	54.8	30.7	63.2	30.1	57.5*	30.1	54.9	30.2	60.5	34.2	55.6	31.8	57.9	34.4	62.0	32.0	63.9	30.5	61.0	35.7	57.6	27.6	60.2	37.9	57.4	29.3

Date.	Wisconsin.										Iowa.										Des Moines.		Dubuque.		Keokuk.			
	Eau Claire.		Grantsburg.		Hancock.		La Crosse.		Madison.		Prentice.		Wausau.		Algona.		Cedar Rapids. §§		Charles City.		Davenport.		Des Moines.		Dubuque.		Keokuk.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.		
1....	53	26	50	23	50	27	50	31	43	28	42	24	44	26	50	28	44	32	49	32	43	31	48	34	49	31	42	34
2....	48	28	54	23	51	28	41	29	40	31	42	30	45	28	47	32	44	31	40	28	49	35	50	36	45	29	52	35
3....	57	23	46	25	53	23	54	26	49	27	50	28	52	23	56	28	54	26	53	26	55	31	60	32	51	27	59	30
4....	74	38	57	27	73	37	72	41	69	39	66	35	71	35	70	44	71	26	70	39	70	44	71	26	72	42	71	47
5....	79	49	74	42	75	49	70	48	69	45	71	45	75	43	73	44	73	51	74	52	73	51	76	57	76	57	76	57
6....	71	40	78	47	70	45	63	33	65	39	69	45	71	43	64	37	68	47	60	34	70	41	64	39	68	38	74	43
7....	49	28	70	33	45	27	50	32	43	29	46	24	44	25	52	28	49	34	50	32	51	34	49	34	52	35	67	55
8....	67	31	52	22	63	31	67	38	61	35	52	22	56	32	66	35	65	35	62	37	64	38	64	39	63	40	67	53
9....	64	42	64	28	62	46	63	43	62	38	52	34	59	37	62	38	63	38	68	48	66	46	65	45	67	47		

TABLE 3.—*Maximum and minimum temperatures for April, 1912. District No. 5—Continued.*

Date.	Hannibal, Mo.		Laporte, Ind.		Illinois.																	
					Cairo.		Greenville.		La Salle.		Monmouth.		Mount Vernon. §§		Peoria.		Springfield.		Winnebago.			
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1.	46	38	36	32	59	50	63	42	41	32	48	31	60	53	43	32	44	38	38	29		
2.	55	39	42	26	52	41	55	32	49	33	54	35	54	39	52	33	55	37	46	30		
3.	57	31	50	24	59	44	57	32	53	31	54	26	61	31	54	31	56	32	51	27		
4.	73	49	72	34	70	51	75	42	72	40	79	32	73	40	74	41	70	36				
5.	78	57	74	45	70	58	77	54	73	51	75	48	79	51	75	49	78	53	72	49		
6.	74	44	70	40	65	52	73	47	72	42	75	47	76	51	74	43	74	47	71	45		
7.	54	37	42	32	54	43	57	37	49	36	54	34	57	38	51	35	53	38	49	32		
8.	63	34	61	30	58	45	61	38	60	39	62	32	64	32	61	31	61	36	60	34		
9.	66	45	69	39	66	47	70	42	68	43	67	41	74	34	68	39	69	41	66	41		
10.	70	42	67	35	68	55	73	48	68	36	72	39	77	44	71	43	72	50	68	30		
11.	75	52	74	40	70	57	76	54	73	49	75	46	80	50	74	46	74	50	74	42		
12.	66	54	68	45	76	59	75	50	68	46	70	55	82	55	70	50	74	56	65	45		
13.	73	54	66	45	68	57	76	60	69	45	77	48	78	56	74	46	74	55	64	42		
14.	74	57	78	47	77	62	79	56	74	55	72	61	82	56	75	54	78	56	74	52		
15.	66	49	70	50	78	61	74	53	65	46	64	47	81	51	62	47	67	51	60	47		
16.	50	41	57	38	67	59	61	47	51	38	50	38	53	50	55	39	55	42	50	37		
17.	47	33	43	36	56	44	51	36	38	32	47	31	52	49	40	31	42	34	38	30		
18.	51	34	38	32	52	40	53	35	42	31	46	32	51	35	45	31	49	35	45	28		
19.	54	33	53	26	57	45	58	36	53	31	54	31	63	34	55	30	56	34	55	25		
20.	65	46	58	36	68	52	68	47	60	35	64	38	70	43	62	43	65	46	60	31		
21.	74	50	70	43	73	57	74	53	69	49	73	50	79	49	71	52	76	53	70	43		
22.	56	42	61	36	62	52	60	44	56	41	60	39	55	48	57	40	58	43	60	38		
23.	67	39	63	28	66	50	68	40	65	36	68	34	70	36	65	33	67	42	65	32		
24.	75	48	60	45	72	57	75	41	67	50	70	45	82	48	69	46	73	48	64	41		
25.	67	55	68	38	72	55	76	54	69	49	70	50	73	52	71	53	69	52	70	42		
26.	73	54	73	40	74	56	72	53	73	48	72	54	80	57	74	50	77	54	70	52		
27.	65	43	60	39	69	59	66	47	62	37	62	34	67	50	64	37	66	44	60	33		
28.	66	50	46	35	71	61	69	50	46	40	54	44	74	54	51	41	67	47	48	36		
29.	51	43	46	39	60	50	60	46	52	40	45	40	65	57	51	40	51	43	56	36		
30.	63	45	63	34	56	50	64	42	61	35	63	35	59	42	63	36	63	39	62	32		
Mean.	63.8	44.6	59.9	37.0	65.7	52.3	67.2	45.2	60.6	40.6	63.0	40.8	69.2	45.9	62.3	40.7	64.6	44.6	60.0	37.2		

\*, \*\*, etc., indicate respectively 1, 2, 3, etc., days missing from the record.

§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.